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By- Pietrzyk, Alfred, Ed.

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The Linguistic Bibliography is a general-purpose tool which provides a comprehensive listing of references to archival documents in linguistics and related fields, with a retrospective coverage of almost thirty years. The measures of the Linguistic Bibliography Project, which were implemented during 1963-1966, are summarized with an amphasis on the two principal goals: (1) Linguistic Bibliography improvements and (2) long-range planning of information activities in the language sciences. The Linguistic Bibliography has been strengthened and improved in several important respects, especially in the coverage of certain priority topics. The Project's long-range proposals for a comprehensive information network and clearinghouse system are directed toward the needs of the language sciences in general, against a background of urgent problems including the remaining technical and economic problems of the Linguistic Bibliography. (RP/AUTHOR)

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The LINGUISTIC BIBLIOGRAPHY Project

FINAL REPORT

to

NATIONAL SCIENCE FOUNDATION

NSF GRANT GN-180

CENTER FOR APPLIED LINGUISTICS

WASHINGTON, D.C.

JUNE 1967

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The LINGUISTIC BIBLIOGRAPHY Project

FINAL REPORT

to

NATIONAL SCIENCE FOUNDATION

NSF GRANT GN-180

"Proposal to Strengthen and Improve the Linguistic Bibliography"

By project personnel of
the Comité International Permanent des Linguistes
and
the Center for Applied Linguistics

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Center for Applied Linguistics
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Edited by
Alfred Pietrzyk
June 1967

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ABSTRACT

The measures of the Linguistic Bibliography Project, which were implemented during 1963-1966 under National Science Foundation grant GN-180, are summarized with an emphasis on the two principal goals, (1) Linguistic Bibliography improvements and (2) long-range planning of information activities in the language sciences.

The Linguistic Bibliography has been strengthened and improved in several important respects, especially in the coverage of certain priority topics. The Project's long-range proposals for a comprehensive information network and clearinghouse system are directed toward the needs of the language sciences in general, against a background of urgent problems including the remaining technical and economic problems of the Linguistic Bibliography.

ABBREVIATIONS

AILA	Association Internationale de Linguistique Appliquée
AMTCL	Association for Machine Translation and Computational Linguistics
CAL	Center for Applied Linguistics
CIPL	Comité International Permanent des Linguistes
CLI	Committee on Linguistic Information
ERIC	Educational Research Information Center
FID	Fédération Internationale de Documentation
LINCS	Language Information Network and Clearinghouse System
MLA	Modern Language Association of America
NSF	National Science Foundation
SIL	Summer Institute of Linguistics
UDC	Universal Decimal Classification
UNESCO	United Nations Educational, Scientific, and Cultural Organization

1. INTRODUCTION

The present document summarizes the activities and results of the Linguistic Bibliography Project supported by a grant from the National Science Foundation, GN-180, for a period of three years, from August 2, 1963 to August 1, 1966. Specific details of these activities are described in the Project's earlier progress reports [1].

On August 2, 1963, CAL received a grant of $170,500 from the National Science Foundation toward the implementation of a proposal [2] "to strengthen and improve" the international Linguistic Bibliography [3] published by CIPL. NSF's support, including the valuable guidance received from its Office of Science Information Service, is hereby gratefully acknowledged. NSF's sponsorhip has also been acknowledged in the front matter of the Linguistic Bibliography volumes produced under the grant, along with CIPL's acknowledgements of the cooperation received from both UNESCO and CAL.

The Linguistic Bibliography series published by CIPL began to appear in 1949. Nineteen volumes have been published to date, the most recent issue being the Linguistic Bibliography for 1964, published in September, 1966. Volume 19 for 1964 contains 12,254 main entries collected from 1,099 serials and an unspecified number of other publications. The Linguistic Bibliography is the only general-purpose tool which provides a comprehensive listing of references to archival documents in linguistics and related fields, with a retrospective coverage of almost thirty years. With the exception of certain shortcomings (§ 2), the Bibliography's overall quality has always been commendable. It is exhaustive in its inclusion of the principal areas of general linguistics, major language groupings and individual languages. The editorial treatment is extremely thorough.

The shortcomings of the Linguistic Bibliography have created a need for certain improvements. Such improvements have been proposed by CAL in

response to a request from the late Alf Sommerfelt, President of CIPL, and Christine Mohrmann, CIPL's Secretary General, and in accordance with suggestions developed by the Committee on Linguistic Information (CLI), a national coordinating body which advises CAL in matters of information policy. The resulting Linguistic Bibliography Project was implemented during 1963-1966, within the framework of a cooperative partnership between CIPL and CAL.

2. OBJECTIVES

The Linguistic Bibliography has been handicapped by a publishing lag of approximately two years, financial difficulties, staffing problems, insufficient coverage of certain topics, indexing problems, and certain technical shortcomings inherent in conventional publications. The Project has provided important remedies for some of these problems, concentrating on a set of first-priority objectives for the early improvement of various aspects of the Linguistic Bibliography operation (§ 3.1), as well as long-range planning toward new approaches with potential applications to the Bibliography and, in conjunction with it, to linguistic information in general (§ 3.2).

In more specific terms, the goals of the Linguistic Bibliography proposal [2] included improvements in the area of (1) manpower as a prerequisite to accelerated publication; (2) fuller coverage of applied, mathematical, Asian and Soviet linguistics; (3) access to periodicals; (4) long-term planning toward "improved information-retrieval services" in linguistics; and (5) indexing studies. The problem of Bibliography sales was also considered.

The Project's efforts to implement these goals are summed up below.

3. SUMMARY OF PROJECT ACTIVITIES

Generally speaking, the Linguistic Bibliography Project has provided the framework for a significant experiment in international cooperation toward vital documentation goals in the language sciences.

The tangible accomplishments of the Project are crucial in two respects. (1) The Linguistic Bibliography has been strengthened in its coverage of certain important categories of the linguistic literature. It has also been improved in its classification and format. (2) With respect to information exchange in the language sciences, the Project has succeeded in the specification of long-range proposals for comprehensive improvements and innovations. However, the Project's efforts to deal with the publishing lag and the problem of sales have been less successful.

CIPL and CAL have placed an equal emphasis on the general importance of the two main sets of goals but, in terms of substantive activity, CIPL has been responsible mainly for the editorial preparation and publication of the Linguistic Bibliography, whereas CAL stressed long-range planning activities in addition to the Project's administrative and financial aspects. Representatives of CIPL have met with CAL personnel in a series of conferences to discuss various aspects of the intensive cooperation between the two organizations.

The consensus resulting from the CIPL-CAL meeting held on February 17-19, 1966, in Washington, D.C., stressed the need for further substantive and financial assistance for the Linguistic Bibliography. Later in 1966, CAL obtained interim support for CIPL's Linguistic Bibliography activities from the National Endowment for the Humanities. Additional funding possibilities are being explored by CIPL, CAL, and officers of other interested European and American professional organizations. The meeting of February 17-19 also agreed that the Linguistic Bibliography could not be involved directly in the preliminaries of a modern systems effort, without

adverse consequences for the continuity of this indispensable service. While CIPL welcomes CAL's information-system proposals for the language sciences, the Linguistic Bibliography's potential significance with respect to a future language-information system cannot be discussed until that system's specifications are fully established. In the meantime, CIPL and CAL will of course continue their very fruitful dialogue about documentation.

3.1 Linguistic Bibliography Measures

The grant, NSF GN-180, has made it possible to implement the activities required to produce and publish three annual issues of the Linguistic Bibliography, Volumes 17 for 1962, 18 for 1963, and 19 for 1964, as well as the entire bibliographic phase (title collection) of Volume 20 for 1965, which is scheduled for publication in August 1967.

The following synopsis summarizes the results achieved in quantitative terms. Volume 16, which has not been produced under the grant, is included for comparison.

Titles Processed, 1961-1965

	Main entries	Cross-References
[Volume 16 for 1961]	[7,880]	[700]
Volume 17 for 1962	9,265	893
Volume 18 for 1963	10,950	1,327
Volume 19 for 1964	12,254	1,116
Volume 20 for 1965*	ca. 12,000	ca. 1,300

In terms of this summary, the Project has succeeded in raising the average level of the annual title collection from approximately 8,000 to

* In press.

about 12,000 main entries. However, in the absence of detailed statistics, it is difficult to judge the extent to which this increase is attributable to the Project's coverage of previously neglected document categories and, on the other hand, to the normal growth of the general literature which has been estimated to increase at an average annual rate of 5% in the sciences.

The steep rise from a level of 8,000 titles to one of 12,000 would not have been possible without the manpower improvements made under the grant. During 1963-1966, five persons contributed to the Project in a coordinating or supervisory capacity, in some cases on a temporary basis. The Project employed seven full-time and thirteen part-time persons, including temporary staff, in various editing, bibliographic, administrative, clerical, and consulting functions (see p. 19, this report). In addition, the Linguistic Bibliography received voluntary title contributions from the following scholars: Wolfgang Benzing, Mainz; József Bihari, Eger (Hungary); C. L. Ebeling, Amsterdam; Alfrēds Gāters, Hamburg; Liisa Kahma, Helsinki; Kazimierz Polański, Kraków; Luis J. Prieto, Cordoba (Argentina); J. B. Rudnyćkyj, Winnipeg; M. van Strien-Gerritsen, Utrecht; Tadeusz Szymański, Kraków; Zdeněk Tyl, Prague; Otmar Werner, Erlangen, and Wiesław Witkowski, Kraków.

In spite of the improved manpower situation, the implementation of the proposal's [2] objective (1), which provided for personnel increases as a prerequisite to accelerated publication, has been only moderately successful. This is to say, the two-year lag in the Bibliography's publication has been reduced by three months for Volume 19, and possibly by four months for Volume 20. The limited success of these efforts is ascribable to two factors. (1) The increased complement of bibliographers has been employed to cover the priority literature specified within the proposal's objective (2), in addition to the main body of the literature regularly covered in the Bibliography. Although this work has proceeded at a brisk pace, it has consumed most of the staff time available under the grant.

(2) The arrangements available for composing and printing are subject to relatively fixed operating schedules. CAL attempted during 1965-1966 to arrange for additional printing facilities at Waverly Press, Inc., Baltimore, but the speedy emergency services which would have been provided in this manner could not be utilized, partly because of the high additional costs involved. More radical answers, such as photocomposition, have been considered within the Project's long-range studies (§ 3.2), but their direct application to the Linguistic Bibliography is deemed premature.

The problem of timely publication has always affected the user demand for the Linguistic Bibliography. There is little doubt that the Bibliography's sales volume would increase if its coverage were rendered up-to-date. The Project's efforts toward a self-supporting Bibliography operation suggested in the original proposal (p. 2) have yielded only limited results. The principal measure has been the establishment of a second distribution center in the United States -- at CAL -- in addition to the commercial outlet provided by Stechert-Hafner in New York City. More recently, the Linguistic Society of America has urged its members to purchase copies of the Linguistic Bibliography.

The proposal's objective (2), whose purpose was to expand the Bibliography's coverage of the subfields of applied, mathematical, Asian, and Slavic linguistics, has been implemented with very good results. For the first time in the Bibliography's history, it became possible during 1963-1966 to collect significant amounts of information on Soviet and Far-Eastern publications. The synopsis, below, shows the totals of main entries in priority categories collected for Volumes 16-20. Volume 16 for 1961 (not produced under the grant) has relatively small totals in the priority categories. Volumes 17-20 contain CIPL's very substantial coverage of Slavic linguistics, which has resulted mainly from several visits to the Soviet Union by CIPL's bibliographer. The impact of CAL's work is visible in the volumes for 1964 and 1965, especially in the Far-Eastern categories. An important part of the entries in Oriental lin-

guistics has been collected by a CAL bibliographer locally, in Japan. It is important to note, however, that the number of titles collected in applied and mathematical linguistics is actually higher, since many of these entries are classified under different main headings such as French or Russian.

Main Entries in Priority Categories, 1961-1965

	Applied* and mathematical linguistics	Slavic linguistics	Oriental** linguistics
[Volume 16 for 1961]	[173]	[805]	[151]
Volume 17 for 1962	145	1,794	84
Volume 18 for 1963	224	2,781	193
Volume 19 for 1964	316	ca. 2,450	ca. 970
Volume 20 for 1965***	340	ca. 2,500	ca. 1,020

The problem of access to periodicals covered by objective (3) has been alleviated to a considerable degree. Many of the materials processed for the Linguistic Bibliography have been readily accessible in The Netherlands and in Washington, D.C., partly as a result of special subscriptions, and partly through acquisitions on a complimentary or exchange basis. However, under the current conditions, travel is still required for the scanning of major portions of the Soviet and Asian publications.

Working within the Project's framework, J. J. Beylsmit, the editor, has improved the classification of the Linguistic Bibliography by subdividing the sections on major languages into "facets" reflecting pertinent aspects of the fourteen subsections of "General Linguistics." For

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* Including language teaching and mechanical translation.

** Including Sinitic, Japanese, and Korean.

*** In press.

example, the field of "English" has the following new subdivisions in Volume 17 for 1962: 0 Bibliography and General. 1 Phonetics and Phonology. 2 Grammar. 3 History. 4 Dialectology. 5 Vocabulary. 6 Orthography. 7 Stylistics, Literary Language. 8 Prosody, Metre, Versification. 13 Teaching. 14 Onomastics. However, the Linguistic Bibliography is still without an indexing device for more specific topics. In view of the complexity of this problem, the Project has concentrated on it mainly in the context of long-range considerations (§ 3.2).

The editor has also improved the general typographic format and bibliographic style of the Linguistic Bibliography. For example, in the recent issues, the main entries are numbered to facilitate cross-referencing. Cross-reference numbers in italics refer to entries in previous volumes. Article titles are no longer printed in italics. English-language titles are capitalized only initially. The Project's emphasis on this aspect has, among other things, led to an informal collection of style conventions and other data relevant to routine processing and bibliographic control. This activity, as well as the substantial experience gained by CAL in the daily preparation and editing of entries to the Bibliography's exacting standards have had a beneficial effect on the long-range explorations outlined below.

3.2 Long-Range Planning

Objectives (4) and (5) of the original Linguistic Bibliography proposal [2] emphasized long-term planning toward "improved information-retrieval services" in linguistics, including indexing studies. The Project's active concentration on these objectives has resulted in a reinterpretation of certain priorities. The main emphasis has been shifted from some of the specific steps suggested originally to a comprehensive and, in CAL's view, feasible plan of action integrating the many considerations of a future language-information system. It has become increasingly evident that premature, ad hoc concentration on specific major services without ref-

erence to a general system framework is not advisable. CAL has therefore stressed rational, discipline-oriented planning. The preliminaries are for the most part completed; the initial phases of a tentative, developmental information-system program for the language sciences have been defined in detail. Under favorable circumstances, the first developmental studies within the new program proposed by CAL may begin in the foreseeable future. The initial program, which also includes limited pilot experiments, would concentrate on the exploration of system-design alternatives, rather than full-scale development.

CAL has, however, made certain limited attempts to experiment with the "dissemination of information" outlined within objective (4) of the Linguistic Bibliography proposal. A pilot issue of an experimental current-awareness bibliography of Arabic linguistics has been completed and distributed informally to selected users for their comments [4]. Following some improvements, this bibliography will be made available to a wider audience in 1967, through the facilities of CAL's ERIC Clearinghouse for Linguistics and the Uncommonly Taught Languages. Moreover, the Project has contributed toward the preliminaries for a current-awareness serial planned by Professor Robert Austerlitz of Columbia University. The purpose of this serial is to provide up-to-date, annotated bibliographic references to the literature on Paleosiberian languages [5], a field which is insufficiently documented with the notable exception of a bibliography published in 1957 by Roman Jakobson et al. [6]. A first set of entries toward the serial was prepared in 1966 [7]. Finally, the Project has been instrumental in the exploration of new processing and printing techniques for an existing current-awareness service, namely, the computational linguistics bibliography published in The Finite String, a newsletter of the Association for Machine Translation and Computational Linguistics (AMTCL). The details of these measures, which have emphasized photocomposition, are described in the Project's Second Annual Progress Report [1] (pp. 25-26). Generally speaking, a recent inventory [8] shows that the need for current awarenss in the language sciences has

been somewhat alleviated by new documentation services for certain subfields or missions.

CAL's information-system program for the language sciences, which is largely the result of steps taken by the Linguistic Bibliography Project, calls tentatively for thirty months of cooperative developmental activities. Its aim is the technical specification and pilot study of essential system requirements. Full-scale implementation, to be attempted in subsequent cooperative measures, would ultimately provide comprehensive information services within a discipline-wide, internationally oriented information network and clearinghouse system. Hopefully, this system can be rendered fully operational by the early 1970's. For brevity's sake, the tentative acronym LINCS (Language Information Network and Clearinghouse System), has been used to refer to this long-range goal. The future characteristics of the LINCS objective cannot, however, be specified a priori.

The program proposed by CAL covers the language sciences, i.e. a comprehensive spectrum of studies in linguistics and related fields, including general and applied linguistics, as well as the interdisciplinary implications of the study and uses of language. Information about language is required not only by the professional linguist, but also in science, technology, and the humanities, particularly in the social and life sciences, education, communication research, mathematics and computational studies, government, industry, and in various practical applications to urgent language, literacy, and reading problems occurring in a social or medical context [9]. Language teachers constitute an important part of this wider clientele. For example, the Modern Language Association (MLA) has 21,000 members. CAL's informal assessment based on the international Linguistic Bibliography indicates that there are approximately 8,000 productive writers on linguistic topics, if the productivity criterion of the American Psychological Association (one publication annually) is also applicable in linguistics. Also, in terms of the literature produced, the

total number of items published in the language sciences must be assumed to exceed the annual scope exemplified in the Linguistic Bibliography for 1964 (most recent issue), where the total of 12,254 main entries is derived from 1,099 periodicals and from other publications. Comparatively speaking, the publishing activities of the language sciences are therefore well within the output range of certain other important fields.

Against this background, the language sciences as a whole are faced with certain problems in the discipline-wide exchange of information. They must, above all, satisfy contemporary user demands for volume, quality, specificity, promptness, compatibility, and flexibility -- factors which are not yet clearly understood and which would be among the chief objects for study in CAL's developmental program. CAL's preliminary inventory of information services in the language sciences [8] points to local or ad hoc approaches within given information centers as the most common solution. The measures directed toward particular needs are often impressive. However, the Linguistic Bibliography Project and certain other activities covered in the inventory show also that bibliographic data can be exchanged, and that certain facilities can be shared advantageously.

The importance of cooperation should be considered against the comparatively modest financial resources available to the language profession. In spite of the fact that various information services continue to depend on external support, there are numerous instances of costly duplication. For example, a comparison of the journal coverage in the Linguistic Bibliography for 1964 and the MLA International Bibliography for 1964 shows that 344 journals are covered simultaneously in both issues. The obvious solution, to be explored by CAL's program, lies in the organized sharing of processes, resources, facilities, inputs and outputs. The program is based on the fundamental assumption that the most effective form of collaboration lies within a discipline-wide framework. However, information-system planning on a discipline-wide scale must undoubtedly face problems associated with large-scale systems, i.e. systems which must serve a user

community that is large in size, widely distributed, varied in its subject interests and service requirements, and dynamic in its growth and change patterns. Under such conditions, information-system planning calls for modern management techniques which in turn require special approaches to the collection, measurement, and analysis of numerous factors in the pattern of information exchange.

With the foregoing considerations in mind, the program envisaged by CAL would develop optimal system specifications, i.e. a "blueprint" for a cooperative, internationally oriented, network system (LINCS) covering the discipline-wide range of the language sciences and designed to provide effective solutions for the problems indicated above. The program would, moreover, develop certain priority components of the proposed system -- in part through pilot-scale experimentation. The following comments deal with important aspects of these objectives against the background of preliminaries contributed by the Linguistic Bibliography Project.

To a great extent, the preparations toward CAL's new program took the form of meetings, discussions, and working papers arranged by the Linguistic Bibliography Project during 1963-1966. CIPL, the Association Internationale de Linguistique Appliquée (AILA), the Fédération Internationale de Documentation (FID), and various other professional organizations, institutions, and specialized centers in several countries participated in the dialogue maintained by the Project. Substantial long-range explorations were also attempted outside the Project's framework by the CLI, the Documentation Research Program and other sections of CAL, and the Documentation Advisers to the Center for Applied Linguistics, a panel of technical consultants. These additional activities have, among other things, led to a Conference on Information in the Language Sciences, held on March 2-4, 1966 at Airlie House, Warrenton, Virginia [10], as well as a preliminary inventory covering 124 information centers and projects throughout the world [8]. CAL's intensive concentration on the long-range aspect, its international and national role as a neutral coordinating body and

clearinghouse for numerous professional activities in the language sciences, and its diverse information services including a newsletter for 6,500 subscribers are among the considerations which have a bearing on CAL's mandate for discipline-wide information-system planning.

The main emphasis of CAL's new program is on rational approaches to optimal system design, which employ modern problem-solving techniques applicable to discipline-wide information network systems. Such techniques include both substantive analyses and quantitative cost/effectiveness measurements, as well as comparisons of alternative design configurations [11]. Simulation in vitro may be one of the techniques to be attempted in this context. The ultimate design for a LINCS would also benefit from a study of behavioral, human parameters in the individual and collective patterns of information exchange [12].

CAL's preliminary inventory [8] suggests that the existing language-information services tend to function in a hierarchical pattern organized mostly by subfields, with a partial orientation toward regional, mission, or project requirements. This tendency to specialize is reflected, for example, in the various bibliographies covering particular subfields. At a more general level, the archival literature has been treated in comprehensive bibliographies. At an intermediate level, there is an incipient tendency toward the formation of subnetworks for such composite areas as language learning and language behavior, and mathematical and computational linguistics. It is therefore reasonable to assume that a partially decentralized hierarchical network of information centers, including some subnetworks, may be among the more likely configurations to be considered for a final LINCS design. Such a configuration might call for the creation of a partially mechanized network with at least one central clearinghouse for switching, general-purpose bibliographies, and referral, plus two or three clearinghouses for subject-specialized and/or regional subnetworks, as well as a limited number of individual information centers interacting with the central clearinghouse facilities. Although the services of LINCS may include several of the initiative and responsive functions of a modern

information system, the chief emphasis would be on bibliographic and indexing services with a comprehensive, flexible coverage, and an adequate degree of specificity. Many of the basic prerequisites, including information centers and services, are already in existence. CAL's program would seek the cooperation of various centers toward an integrated utilization of the existing facilities.

Although the LINCS design would not be fully implemented within the first developmental program, the latter would yield early tangible results in terms of urgently needed system components. The program's suggestions for the development of a general-purpose thesaurus for the language sciences are crucial. The Linguistic Bibliography Project has made a special effort to deal with the preliminaries toward the study and development of indexing tools [13]. The original proposal objective (5) which provided for indexing studies focused on the Linguistic Bibliography has been modified to accommodate the comprehensive requirements of a future information system. The international significance of the Universal Decimal Classification (UDC) was also considered in this context [13]. (In a secondary development, CAL's UDC discussions with the FID have resulted in the organization of the new FID Committee on Linguistics in Documentation whose secretariat is maintained by CAL under a grant from NSF, GN-618.)

CAL's program would also study and develop a flexible file-management system appropriate to a future LINCS. As far as possible, these studies would strive toward a maximal level of generality, utilizing recent research in automatic text-processing systems, including photocomposition [14]. Every effort would be made to cooperate with centers which have similar plans and/or activities in this area. As soon as the basic aspects of the file-management system become operational, they would be used in pilot studies entailing bibliographic experiments, the testing of new indexing tools, and limited attempts concentrating on the network interaction of selected specialized information centers.

CAL's information-system program would involve appropriate cooperative arrangements on both international and national levels, including suitable provisions for the planning of interfaces between a future LINCS and the information systems of various disciplines and missions.

4. CONCLUSIONS

The Linguistic Bibliography Project demonstrated during the three-year period, 1963-1966, that international cooperation in the planning and implementation of extensive bibliographic activities can be successful in several important respects. The Project has thus set a crucial precedent which may have a bearing on plans for a future network system for language information.

The Project's concrete results are significant in the substantially increased output of titles, the thorough bibliographic coverage of priority topics, and certain improvements of the Linguistic Bibliography's classification and format. It appears, however, that the available work force has not been sufficient for the additional effort required in order to reduce the Bibliography's publishing lag to a meaningful extent. This problem is assumed to have a direct effect on the Bibliography's sales. The revenues are still too small for a publication that has not been self-supporting.

The problems which continue to affect the Linguistic Bibliography are part of a syndrome observable throughout the pattern of information exchange in the language sciences. In order to deal effectively with the complex economic and user requirements for comprehensive information services, a special emphasis has been placed on the long-range objectives of the Linguistic Bibliography Project. The Project's other tangible achievement -- a detailed set of information-system proposals for the language sciences -- is of particular importance. If the Project's

proposals are implemented, systematic, rational, and cooperative interaction within a discipline-wide information network will provide effective long-term solutions.

REFERENCES AND NOTES

1. Center for Applied Linguistics, The Linguistic Bibliography Project. First Annual Progress Report, August 2, 1963 - August 1, 1964. Washington, D.C., 1965. Idem, The Linguistic Bibliography Project. Second Annual Progress Report, August 2, 1964 - August 1, 1965. Washington, D.C., 1966. Idem, The Linguistic Bibliography Project. Informal Progress Report for the Period August 2, 1965 - May 1, 1966. Washington, D.C., 1966.

2. Center for Applied Linguistics of the Modern Language Association of America, Proposal to Strengthen and Improve the Linguistic Bibliography. Submitted to the National Science Foundation by Charles A. Ferguson, Center for Applied Linguistics; through Geo. Winchester Stone, Jr., and Allan F. Hubbell, Modern Language Association of America [n.d.].

3. Comité International Permanent des Linguistes, Linguistic Bibliography for the Years 1939-1947, 1948, et seq. and Supplement for Previous Years. Utrecht/Antwerp: Spectrum. [Reviewed by: Marcel Cohen, L'Année sociologique (Paris), 3e série, 1959, 533-534; Idem, L'Année sociologique, 3e série, 1961, 529; Robert A. Hall, Jr., Language 26.185 (1950); Idem, Language 27.610 (1951); Harry Hoijer, IJAL 18.49 (1952); Idem, IJAL 20.80-81 (1954); Karel Horálek, Slovo a slovesnost (Prague) 23.236-237 (1962); Michel Lejeune, Revue des études anciennes 64.142 (1962); Idem, Revue des études anciennes 67. 171 (1965); Wolf Leslau, Word 9.167-169 (1953); Vittore Pisani, Paideia (Genoa) 16.373 (1961); Idem, Paideia 17.394 (1962); George L. Trager, Language 30.432-433 (1954); and S. Ullmann, Archivum Linguisticum 3.75-77 (1951).]

4. Theodore Prochazka, Jr. (ed.), Arabic Linguistics: 1960-1965. An Interim Bibliography of Selected Publications. Washington, D.C.: Center for Applied Linguistics, 1966 [preprint].

5. The Paleosiberian languages comprise (1) the Luorawetlan family (consisting of Chukchi, Koryak, and Kamchadal -- all three are different languages), (2) Yukagir, (3) Ket, and (4) Gilyak.

6. Roman Jakobson, Gerta Hüttl-Worth, and John Fred Beebe, Paleosiberian Peoples and Languages. A Bibliographical Guide. New Haven: HRAF Press, 1957.

7. Robert Austerlitz, Materials for a Paleosiberian Bibliography. New York: Columbia University, 1966 [unpublished manuscript].

8. Center for Applied Linguistics, Information Activities in the Language Sciences: A Preliminary Inventory. Washington, D.C., 1967 [forthcoming].

9. See, for example, Paul L. Garvin, "What is Linguistic Information?" In Information in the Language Sciences: Proceedings of a Conference Held at Airlie House, March 4-6, 1966, Under the Sponsorship of the Center for Applied Linguistics, Robert R. Freeman, Alfred Pietrzyk, and A. Hood Roberts, eds. New York: American Elsevier, 1967 [forthcoming].

10. Robert R. Freeman, Alfred Pietrzyk, and A. Hood Roberts (eds.), Information in the Language Sciences: Proceedings of a Conference Held at Airlie House, March 4-6, 1966, Under the Sponsorship of the Center for Applied Linguistics. New York: American Elsevier, 1967 [forthcoming].

11. See, for example, William A. Creager, "The Application of Simulation Techniques to the Design and Management of Information Systems." In Information in the Language Sciences: Proceedings of a Conference Held at Airlie House, March 4-6, 1966, Under the Sponsorship of the Center for Applied Linguistics, Robert R. Freeman, Alfred Pietrzyk, and A. Hood Roberts, eds. New York: American Elsevier, 1967 [forthcoming].

12. See, in this connection, William D. Garvey, and Belver C. Griffith, "Scientific Information Exchange in Psychology." Science 146:3652. 1655-1659 (1964).

13. Center for Applied Linguistics, Prospects for Related Studies in Linguistics and Documentation. Washington, D.C., 1964 [prepared for 3rd Meeting of FID Committee on Linguistic Problems, The Hague, September 24, 1964]. Idem, Tentative Projects in Linguistics and Documentation. Washington, D.C., 1965 [prepared for 1965 FID Congress, Washington, D.C.].

14. See, for example, Glenn E. Roudabush, "Problems of a Model Automatic Information System." In Information in the Language Sciences: Proceedings of a Conference Held at Airlie House, March 4-6, 1966, Under the Sponsorship of the Center for Applied Linguistics, Robert R. Freeman, Alfred Pietrzyk, and A. Hood Roberts, eds. New York: American Elsevier, 1967 [forthcoming].

PROJECT PERSONNEL: 1963-1966

I COMITÉ INTERNATIONAL PERMANENT DES LINGUISTES (CIPL)
Nijmegen

General Supervision
Christine Mohrmann

Project Staff
J. J. Beylsmit, Linguistic Bibliography Editor; N. E. Schroten; M. Kruse; C. Beylsmit-Hendriks (1964-1966)

II CENTER FOR APPLIED LINGUISTICS (CAL)
Washington, D. C.

General Supervision
Charles A. Ferguson; Alfred Pietrzyk; Alfred S. Hayes (1963); Guy R. Kirkendall (1963-1965)

Project Staff
Kathleen Pearce Lewis (1963-1965); Philip A. Luelsdorff (1965-1966); George D. Selim (1966); Irene T. Teoh (1965-1966); Theodore Prochazka (1965-1966); Tomoyuki Fukuda (1965-1966); Paul Yang (1965-1966); Young Kuk Ko (1964-1966); Ik Mo Lee (1966); Frances Lamberts; Marilyn Dickson (1965-1966); Hedi A. St. Denis (1965-1966); Laila Khoury (1966)

Consultants
Don Graham Stuart, Far-Eastern Languages; B.-Nam Park, Korean; Josephine Fang, Bibliographic Techniques